

### **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has cancelled claim 2. Accordingly, upon entry of this Amendment, claims 1 and 3-14 are all the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

#### **I. Overview of the Office Action**

Claims 1-4, 7, 9, 13, and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Park et al. (U.S. Patent No. 5,993,178, hereafter "Park"). Claims 5, 6, 8, and 10-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Penswick et al (U.S. Patent No. 5,920,133).

#### **II. Preliminary Matters**

##### **A. Foreign Priority**

Applicant thanks the Examiner for acknowledging Applicant's claim for Foreign Priority, and confirming receipt of a certified copy of the priority document in the United States Patent and Trademark Office.

#### **III. Prior Art Rejections**

##### **A. The Present Invention**

The present invention relates to a linear compressor comprising a cylinder block 22 which forms a compressing chamber 21. A piston 23 is reciprocatably provided in the compressing chamber 21, and a reciprocating member 44 is connected to the piston 23 to reciprocate with the piston as a single body. A driver 30 drives the reciprocating member 44. A

resonance spring 50, which comprises a first connecting part 51 formed with a plurality of first connecting holes 53, permits connection to the cylinder block 22, and a second connecting part 55 that is provided inside of the first connecting part 51 and formed with a second connecting hole 57 permits connection to the reciprocating member 44 to reciprocate with the reciprocating member as a single body. A plurality of arms 60 are spaced apart from one another between the first connecting part 51 and the second connecting part 55, each of the arms comprising a first end connected to the first connecting part 55 to be positioned between the plurality of first connecting holes 53, and a second end connected to the second connecting part 55 to be positioned in the vicinity of the second connecting part 55, and a plurality of arm bodies of a spiral shape to connect the first end and the second end (FIG. 4).

#### **B. Disclosure of Park**

Park generally relates to a linear compressor (FIGS. 1 and 3) which includes a piston 32 that is slidably mounted in a cylinder (column 2, lines 56-64). A hermetic spring holder 51 has an end portion which is connected to a corresponding portion of the cylinder (column 3, lines 16-19). A spring 28 supports the piston.

#### **C. Disclosure of Penswick**

Penswick generally relates to flexures and flexure assemblies for use in thermal regenerative machines (column 4, lines 36-44). The flexure is a flat spring formed from a flat metal sheet having kerfs forming axially movable arms across them (column 3, lines 28-43), and at least one aperture communicating with and extending from an end portion of the kerf (column 3, lines 28-43).

#### E. Analysis

The Examiner alleges that Park discloses all of the features of independent claim 1. Applicant respectfully disagrees with the Examiner's position. There is no teaching or suggestion in Park of the feature "wherein a width of the first connecting part is in a range of approximately one half a width of the arm body and three times the width of the arm body", as recited in amended independent claim 1. The Examiner broadly cites FIG. 4 of Park as allegedly disclosing this feature of the claim. However, assuming *arguendo* that the Examiner reads the claimed "first connecting part" on part 28b of FIG. 4 of Park, it is quite clear that a width of this part is not in a range of approximately one half a width of the arm body and three times the width of the arm body, as recited by amended independent claim 1. The range of the width of the first connecting part allows a change of an average stiffness with respect to a gas pressure and a stiffness of a resonance spring according to a maximum displacement of a piston to have a nonlinear property. Additionally, the strength of an edge of an arm is decreased during the displacement of the piston.

Further, Penswick does not cure the deficiencies of Park.

Accordingly, Applicant respectfully submits that independent claim 1 should be allowable, because the cited references, alone or in combination do not teach or suggest all of the features of the claim. Claims 3-14 should also be allowable at least by virtue of their dependency on independent claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

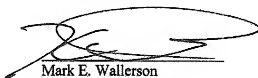
AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Patent Application No.: 10/813,162

Attorney Docket No.: Q79803

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE

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